What is claimed is:

1. A method for sanitizing organic waste, comprising:

mixing organic waste with nutrient rich organic material to thereby form a mixture;

forming a porous matrix comprising the mixture of organic waste and nutrient rich organic material;

maintaining the matrix, without introducing exogenous heat or chemicals, at a temperature and duration sufficient to reduce the amount of living microorganisms in the mixture to sanitary levels; and

recovering a sanitized mixture.

2. The method according to claim 1, wherein the organic waste is selected from the group consisting of organic manure, contaminated soil, residual sludge from sewage plants treating domestic or urban wastewater as well as from other sewage plants treating wastewater of a composition similar to domestic and urban wastewater, residual sludge from septic tanks and other similar installations for the treatment of sewage, residual sludge from other sewage plants or sources sludge derived from industrial products and byproducts comprising organic material, including sludge from food-processing industry, sludge from otherwise biodegradable materials, not necessarily of biological origin, an organic sludge composed of materials such as sludges resulting from production of antimicrobials and other pharmaceutical products, bacterial fermentation sludges, sludges resulting from production of beer and wine, mushroom compost waste, paper mill sludges, sludges that contain microorganisms resulting from recycled organic products such as paper products, sludges resulting from the growth of microorganisms for the production of chemicals and organics, industrial sludges and byproducts resulting from the production of microbial products and foodstuffs, sludges resulting from the animal slaughter industry, includes those that are digested or otherwise broken down by microorganisms, and sludges containing animal manure, including at least one of chicken, pig, cattle, and horse manure, and mixtures of the above sludges and materials.

3. The method according to claim 1, wherein the organic waste is selected from the group consisting of sludge, soil contaminated by oil, soil contaminated by grocery-industry products or byproducts, contaminated animal-feed, cadavers and butcher waste, cattle feedlot and swine manure, and composted manure used in organic farming practices.

4. The method according to claim 1, wherein the mixture comprises about 30% to 80% nutrient rich organic material.

5. The method according to claim 1, wherein the nutrient rich organic material is selected from the group consisting of plant residues, products from forest and paper industry including tree bark, debarking reject, knot reject, fiber sludge, bio sludge, chemical sludge, mixed sludge, wood working shop reject and factory second rejected products, screen reject, recycled fiber including dip sludge, screenings, and wood chops, products from saw-mill industry including saw dust and planning shavings, products from agriculture including hay, straw, and other crop residues from grain, sugar cane, maize, and rice, products from other food-processing industries including whey, peel, coco fiber, and products from vegetables and fruit processing industry including rice reject and olive seeds, garden and tree waste, and peat.

6. The method according to claim 1, further comprising adding to the mixture an adjusting component selected from the group consisting of chalk, limestone, lime sludge, lime mud, burnt lime mud, green liquor sludge, ashes, mineral fertilizer, and material from fresh or sea water that is rich in nutrients, or solutions, suspension or other mixtures thereof.

7. The method according to claim 6, wherein the material from the fresh or sea water is selected from the group consisting of algae and organic manure.

8. The method according to claim 1, further comprising the step of covering the matrix, wherein said covering step precedes the step of maintaining the matrix, without introducing exogenous heat or chemicals, at a temperature and duration sufficient to reduce the amount of living microorganisms in the mixture to sanitary levels.

9. The method according to claim 1, further comprising the step of homogenizing the mixture, wherein said homogenizing step precedes the step of recovering a sanitized mixture.

10. The method according to claim 1, wherein the organic waste is sewage sludge and the nutrient rich organic material is bark, wherein the bark comprises 65% of the mixture and the sewage sludge comprises 35% of the mixture.

11. A sanitized mixture obtained by the method of claim 1.

12. A method of dewatering organic waste, comprising:

mixing organic waste with organic fibrous material sufficient to promote insignificant odor and high dry matter content, or without introducing significant amounts of exogenous chemicals; and

dewatering said mixture.

13. The method according to claim 12, wherein the organic waste is selected from the group consisting of organic manure, contaminated soil, residual sludge from sewage plants treating domestic or urban wastewater as well as from other sewage plants treating wastewater of a composition similar to domestic and urban wastewater, residual sludge from septic tanks and other similar installations for the treatment of sewage, residual sludge from other sewage plants or sources sludge derived from industrial products and byproducts comprising organic material, including sludge from food-processing industry, sludge from otherwise biodegradable materials, not necessarily of biological origin, an organic sludge

composed of materials such as sludges resulting from production of antimicrobials and other pharmaceutical products, bacterial fermentation sludges, sludges resulting from production of beer and wine, mushroom compost waste, paper mill sludges, sludges that contain microorganisms resulting from recycled organic products such as paper products, sludges resulting from the growth of microorganisms for the production of chemicals and organics, industrial sludges and byproducts resulting from the production of microbial products and foodstuffs, sludges resulting from the animal slaughter industry, includes those that are digested or otherwise broken down by microorganisms, and sludges containing animal manure, including at least one of chicken, pig, cattle, and horse manure, and mixtures of the above sludges and materials.

14. The method according to claim 12, wherein the organic waste is selected from the group consisting of sludge, soil contaminated by oil, soil contaminated by grocery-industry products or byproducts, contaminated animal-feed, cadavers and butcher waste, cattle feedlot and swine manure, slurry from paper industry, and composted manure used in organic farming practices.

15. The method according to claim 12, wherein the mixture comprises about 5% to 60% by weight fibrous organic material.

16. The method according to claim 12, wherein the organic fibrous material is selected from the group consisting of cellulose, paper reject, dissolved or not dissolved papers and boards, bark, fiber sludge, park waste, and agricultural products or byproducts.

17. The method according to claim 12, further comprising adding to the mixture an adjusting component selected from the group consisting of chalk, limestone, lime sludge, lime mud, burnt lime mud, green liquor sludge, ashes, and material from fresh or sea water that is fibrous, or solutions, suspension or other mixtures thereof.

18. The method according to claim 1, further comprising the step of dewatering said organic waste prior to said mixing with nutrient rich organic material.

19. A method for sanitizing organic waste, comprising the steps of:

mixing organic waste with nutrient rich organic material to thereby form a mixture;

forming a porous matrix comprising the mixture of organic waste and nutrient rich organic material;

maintaining the matrix, without introducing exogenous heat or chemicals, at a temperature and duration sufficient to reduce the amount of living microorganisms in the mixture to sanitary levels, thereby generating a sanitized mixture; and

recovering the sanitized mixture.

20. The method according to claim 19, wherein the maintaining step includes periodically mixing the matrix to thereby aerate the organic waste and nutrient rich material.

21. The method according to claim 19, wherein the maintaining step includes covering the matrix with a cover.

22. The method according to claim 19, wherein the maintaining step includes maintaining the temperature of the matrix at a range of 50 to 90 degrees centigrade.

23. The method according to claim 19, wherein the organic waste is sludge or manure, and the nutrient rich material is selected from the group consisting of bark, knot waste, park debris, and fiber sludge.

24. The method according to claim 19, wherein the nutrient rich material comprises 60-70% of the matrix.

25. The method according to claim 20, wherein the periodically mixing step includes mixing the matrix between 1 and 4 times per month.

26. The method according to claim 19, wherein the sludge is dewatered sludge from a waste water treatment plant.

27. The method according to claim 19, further comprising the step of dewatering said organic waste prior to said mixing with nutrient rich organic material.

28. The method according to claim 19, further comprising the step of introducing sufficient amount of exogenous oxygen to the matrix to facilitate the sanitizing process.

29. A method for producing a sanitized mixture, comprising:

mixing organic waste with nutrient rich organic material to thereby form a mixture;

forming a porous matrix comprising the mixture of organic waste and nutrient rich organic material;

maintaining the matrix, without introducing exogenous heat or chemicals, at a temperature and duration sufficient to reduce the amount of living microorganisms in the mixture to sanitary levels;

recovering the sanitized mixture; and

dewatering said organic waste prior to said mixing with nutrient rich organic material.